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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Tetsuo Nishikawa

Nanjo C-1

6210

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FLYNN, THIEL, BOUTELL & TANIS, P.C.
2026 Rambling Road
Kalamazoo, MI 49008-1699

EXAMINER

SHOSHO, CALLIE E

ART UNIT

PAPER NUMBER

1714

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/02/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 09/973,646	Applicant(s) NISHIKAWA ET AL.	
	Examiner Callie E. Shosho	Art Unit 1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7,12 and 16-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,3-7,12 and 16-23 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

1. It is noted that prosecution of this application has been re-opened in light of new references that came to the attention of the examiner following the Board decision of 1/31/06.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 3-7, 12, 16-19, and 22-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Johnson (U.S. 4,698,059) taken in view of the evidence given in Bussink et al. (U.S. 4,267,096).

Johnson discloses composition comprising 80-90% tungsten and 10-20% polymeric composition comprising styrene-based thermoplastic elastomer and barium sulfate. The styrene-based thermoplastic elastomer is hydrogenated AB or ABA block polymer wherein A is monovinyl arene polymer block and B is conjugated diene polymer block. There is also disclosed molded article obtained from the composition. Attention is drawn to Table II that discloses composition comprising 85-90% tungsten powder and 5-8% Kraton G-1651 and G-1650, which are well known, as evidenced by Bussink et al. (Table 2), as hydrogenated styrene-

butadiene-styrene block polymers (col.2, lines 24-33, col.3, lines 24-32, col.5, line 5, col.7, line 7, and col.10, lines 29-64). Given that the molded article is obtained from tungsten and styrene-based elastomer identical to that presently claimed in amounts identical to that presently claimed, it is clear that the molded article would inherently possesses hardness and specific gravity as presently claimed.

In light of the above, it is clear that Johnson anticipates the present claims.

4. Claims 1, 4-7, and 16-23 are rejected under 35 U.S.C. 102(e) as being anticipated by DeMeo et al. (U.S. 2005/0211930) taken in view of the evidence given in Kawamura et al. (U.S. 5,908,884).

DeMeo et al. disclose composition comprising 85% tungsten and 15% polymer such as acrylonitrile-butadiene-styrene, i.e. styrene-based thermoplastic elastomer. The composition further includes aluminum oxide as well as nickel or copper. There is also disclosed molded article obtained from the composition (paragraphs 8-10, 34, 35(lines 6-7), 38, and 79 (lines 1-7 and 20-24). Although there is no explicit disclosure regarding the hardness or specific gravity of the molded article given that it is well known, as evidenced by Kawamura et al. (col.4, lines 50-51), that tungsten possesses specific gravity of 19.3 and given that the molded article of DeMeo et al. is obtained from tungsten and styrene-based elastomer in amounts identical to that presently claimed, it is clear that the molded article would inherently possesses hardness and specific gravity as presently claimed.

In light of the above, it is clear that DeMeo et al. anticipate the present claims.

Art Unit: 1714

5. Claims 1 and 4-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawamura et al. (U.S. 5,908,884).

Kawamura et al. disclose composition obtained from rubber and 85-97% powder including tungsten powder. There is also disclosed molded article obtained from the composition. Attention is drawn to example 4 of Kawamura et al. that discloses composition comprising 92% tungsten powder and 8% styrene butadiene rubber, i.e. styrene-based thermoplastic elastomer (col.4, lines 1-9, col.4, line 53-col.5, line 5, col.9, line 55-col.10, line 3, and example 4). Although there is no explicit disclosure regarding the hardness or specific gravity of the molded article given that Kawamura et al. (col.4, lines 50-51) disclose that tungsten possesses specific gravity of 19.3 and given that the molded article of Kawamura et al. is obtained from tungsten and styrene-based elastomer in amounts identical to that presently claimed, it is clear that the molded article would inherently possesses hardness and specific gravity as presently claimed.

In light of the above, it is clear that Kawamura et al. anticipate the present claims.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1714

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
8. Claims 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (U.S. 4,698,059) in view of Emde (U.S. 4,692,152).

The disclosure with respect to Johnson in paragraph 3 above is incorporated here by reference.

The difference between Johnson and the present claimed invention is the requirement in the claims of steel.

Emde, which is drawn to bolus for medial tube as is Johnson, discloses the use of steel in the bolus given that steel increases the weight of the tube and provides stiffness and is harmless in medical uses (col.1, lines 50-51 and col.3, line 65-col.4, line 9).

In light of the motivation for using steel disclosed by Emde as described above, it therefore would have been obvious to one of ordinary skill in the art to use steel in Johnson in order to produce article with suitable weight and stiffness, and thereby arrive at the claimed invention.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1714

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Callie E. Shosho
Primary Examiner
Art Unit 1714

CS
3/19/07



Gary Jones
Director
TC1700

WILLIAM GARY JONES
DIRECTOR
TECHNOLOGY CENTER 1700